



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
610-774-1300



Photometric Test Report

Relevant Standards
IES LM-79-2008, ANSI C82.77-2002

Prepared For
Auroralight Inc

2742 Loker Avenue West
Carlsbad
CA, 92010
United States

Catalog Number

HPL8-5-30

Order Number

11745044

Test Number

11745044.26

Test Date

2017-05-18

Prepared By

Javier Caban, Technician

Approved By

Tiffany Hamm, Project Handler

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Conical 8" copper shade with clear glass lens, cylindrical copper stem and brass base
Lamp: 64 white LEDs
Mounting: Path/Area
Ballast/Driver: Integrated

Luminaire



Luminaire Characteristics

Luminous Diameter: 8.00 in.

Summary of Results

Roadway Classification: Type V, Very Short
Cutoff Classification: Semicutoff
BUG Rating: B0 U1 G0

Test Conditions

Test Temperature: 24.8 °C
Voltage: 11.94 VAC
Current: 0.5828 A
Power: 4.527 W
Power Factor: 0.651
Frequency: 60 Hz
Current THD: 69.3 %

Tested in 30 planes left side, 30 planes right side, left and right averaged
Vertical test increments are 2.5 degrees
Test distance exceeds five times the greatest luminous opening of luminaire

Laboratory results may not be representative of field performance
Ballast factors have not been applied



Distribution - Goniophotometer

Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.8 °C	11.94 VAC	0.5828 A	4.527 W	0.651	60 Hz	69.3 %

Summary of Results

Spacing Criteria

0-180: 1.27
90-270: 1.27

Total Lumen Output:

194.7 Lumens

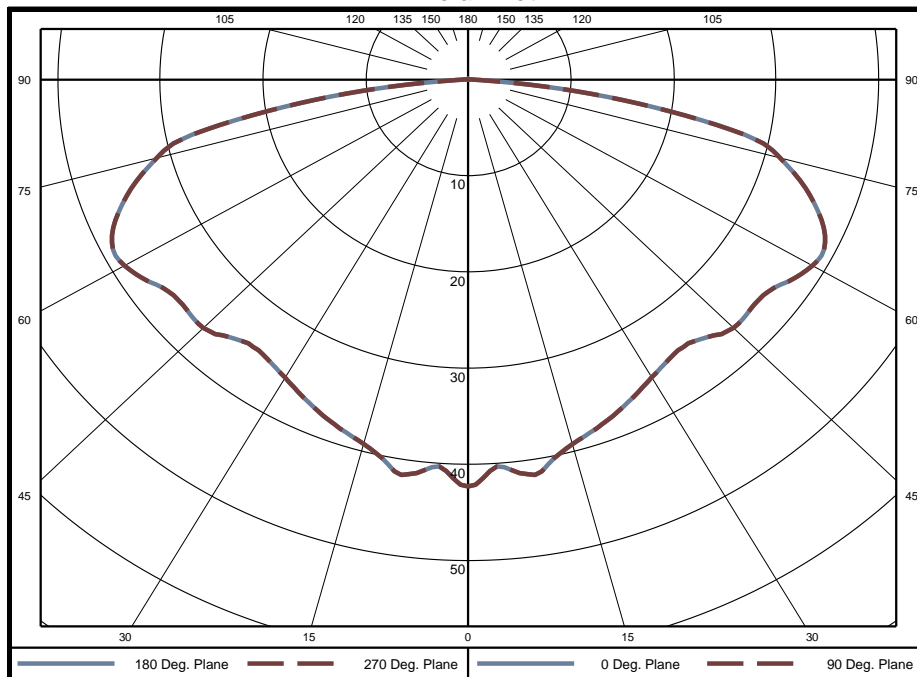
Luminaire Efficacy:

43.0 lm/w

Maximum Candela:

42 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0.98	0.5%	60-65	18.84	9.7%	120-125	0.02	0.0%
5-10	2.95	1.5%	65-70	18.73	9.6%	125-130	0.02	0.0%
10-15	4.75	2.4%	70-75	17.51	9.0%	130-135	0.02	0.0%
15-20	6.37	3.3%	75-80	14.83	7.6%	135-140	0.02	0.0%
20-25	7.87	4.0%	80-85	7.40	3.8%	140-145	0.02	0.0%
25-30	9.19	4.7%	85-90	1.13	0.6%	145-150	0.02	0.0%
30-35	10.38	5.3%	90-95	0.21	0.1%	150-155	0.02	0.0%
35-40	11.64	6.0%	95-100	0.08	0.0%	155-160	0.01	0.0%
40-45	13.30	6.8%	100-105	0.05	0.0%	160-165	0.01	0.0%
45-50	14.74	7.6%	105-110	0.04	0.0%	165-170	0.01	0.0%
50-55	15.91	8.2%	110-115	0.03	0.0%	170-175	0.01	0.0%
55-60	17.56	9.0%	115-120	0.03	0.0%	175-180	0.00	0.0%

Zone	Lumens	% of Luminaire
0-40	54	27.8%
0-60	116	59.4%
0-90	194	99.7%
90-180	1	0.3%



Candela Tabulation

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
	0	42.28	42.28	42.28	42.28	42.28	42.28	42.28	42.28	42.28	42.28	42.28	42.28	42.28	42.28	42.28
	5	40.43	40.43	40.43	40.43	40.43	40.43	40.43	40.43	40.43	40.43	40.43	40.43	40.43	40.43	40.43
	10	41.34	41.34	41.34	41.34	41.34	41.34	41.34	41.34	41.34	41.34	41.34	41.34	41.34	41.34	41.34
	15	39.22	39.22	39.22	39.22	39.22	39.22	39.22	39.22	39.22	39.22	39.22	39.22	39.22	39.22	39.22
	20	38.11	38.11	38.11	38.11	38.11	38.11	38.11	38.11	38.11	38.11	38.11	38.11	38.11	38.11	38.11
	25	36.93	36.93	36.93	36.93	36.93	36.93	36.93	36.93	36.93	36.93	36.93	36.93	36.93	36.93	36.93
	30	35.72	35.72	35.72	35.72	35.72	35.72	35.72	35.72	35.72	35.72	35.72	35.72	35.72	35.72	35.72
	35	34.87	34.87	34.87	34.87	34.87	34.87	34.87	34.87	34.87	34.87	34.87	34.87	34.87	34.87	34.87
	40	35.21	35.21	35.21	35.21	35.21	35.21	35.21	35.21	35.21	35.21	35.21	35.21	35.21	35.21	35.21
	45	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50
	50	36.34	36.34	36.34	36.34	36.34	36.34	36.34	36.34	36.34	36.34	36.34	36.34	36.34	36.34	36.34
	55	37.12	37.12	37.12	37.12	37.12	37.12	37.12	37.12	37.12	37.12	37.12	37.12	37.12	37.12	37.12
	60	38.67	38.67	38.67	38.67	38.67	38.67	38.67	38.67	38.67	38.67	38.67	38.67	38.67	38.67	38.67
	65	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31
	70	35.44	35.44	35.44	35.44	35.44	35.44	35.44	35.44	35.44	35.44	35.44	35.44	35.44	35.44	35.44
	75	31.42	31.42	31.42	31.42	31.42	31.42	31.42	31.42	31.42	31.42	31.42	31.42	31.42	31.42	31.42
	80	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43	21.43
	85	6.07	6.07	6.07	6.07	6.07	6.07	6.07	6.07	6.07	6.07	6.07	6.07	6.07	6.07	6.07
	90	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
	95	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	100	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
	105	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
	110	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
	115	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	120	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	125	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	130	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	135	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	140	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	145	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	150	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	155	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
	160	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
	165	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
	170	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
	175	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
	180	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07

Average Luminance (cd/m²)

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	45	90
	0	1304	1304
	45	1592	1592
	55	1996	1996
	65	2795	2795
	75	3743	3743
	85	2146	2146



Utilization of Lumens - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **																	
0	232	232	232	232	226	226	226	226	216	216	216	207	207	207	198	198	198	194
1	205	192	181	171	199	188	178	168	179	171	163	171	164	158	164	158	153	148
2	181	161	144	130	175	157	141	128	149	136	125	142	131	122	136	127	119	114
3	162	137	117	102	156	133	115	101	127	111	99	121	108	97	116	104	95	90
4	146	118	98	82	141	115	96	82	110	93	80	105	91	79	100	88	78	73
5	133	104	83	68	128	101	82	68	97	80	67	93	78	66	89	76	65	60
6	122	92	72	58	118	90	71	58	86	70	57	83	68	56	79	66	56	51
7	112	83	64	50	109	81	63	50	78	61	49	75	60	49	72	58	48	44
8	104	75	57	44	101	74	56	44	71	55	43	68	54	43	66	52	43	38
9	97	68	51	39	94	67	50	39	65	49	38	62	48	38	60	47	38	34
10	91	63	46	35	88	62	46	35	60	45	35	58	44	34	56	43	34	30

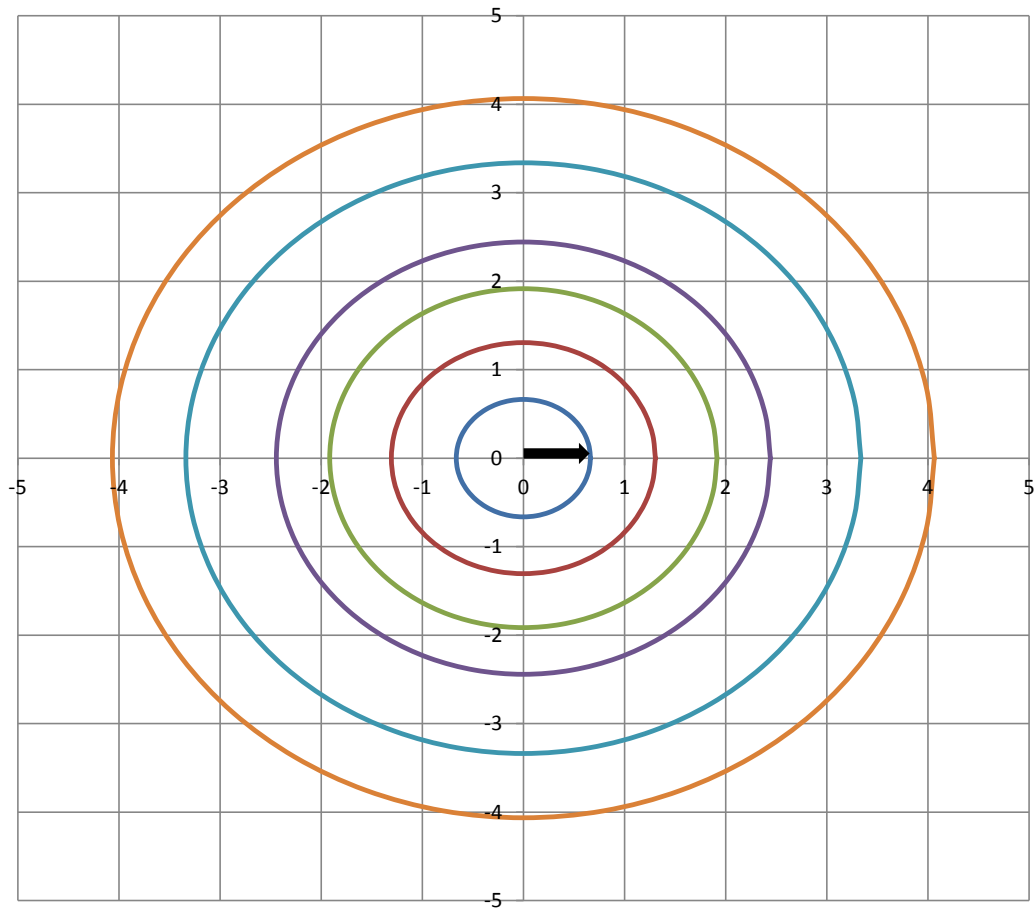
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	42.28 Candela
Central Cone Intensity:	41 Candela
Beam Flux:	185.7 Lumens
Beam Angle (0-180):	160.2 Degrees
Beam Angle (90-270):	160.2 Degrees
Field Angle (0-180):	171.4 Degrees
Field Angle (90-270):	171.4 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		2.64	5.10
6.00		1.17	7.65
8.00		0.661	10.2
10.0		0.423	12.7
12.0		0.294	15.3
14.0		0.216	17.8
16.0		0.165	20.4



ISOFootcandle Plot

Mounting Height - 2 Feet



Grid Lines in Units of Mounting Height





IES "BUG" Rating
(Back Light, Uplight, Glare)
Per IES TM-15-11



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	16.1	8.2%
FM	(30-60)	41.8	21.4%
FH	(60-80)	35.1	18.0%
FVH	(80-90)	4.4	2.2%
BL	(0-30)	16.1	8.2%
BM	(30-60)	41.8	21.4%
BH	(60-80)	35.1	18.0%
BVH	(80-90)	4.4	2.2%
UL	(90-100)	0.3	0.2%
UH	(100-180)	0.3	0.2%
Total		195.4	100.0%
BUG Rating	B0 U1 G0		